STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

EFS

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: $\frac{10/578,839A}{1540}$ Source: $\frac{1540}{2/26/07}$

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm , EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
 Alexandria, VA 22314

Revised 01/10/06

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/578, 839A
ATTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters , instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence. (see item 11 below)
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules
PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFWO

DATE: 02/26/2007 RAW SEQUENCE LISTING PATENT APPLICATION: US/10/578,839A TIME: 14:32:39

Input Set: N:\efs\02 26 07\10578839a efs\Sequencelisting.txt

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5 <120> TITLE OF INVENTION: CANCER CELL TARGETING GENE DELIVERY METHOD
7 <130> FILE REFERENCE: Q94769
9 <140> CURRENT APPLICATION NUMBER: US 10/578,839A
                                                      see m3-4
10 <141> CURRENT FILING DATE: 2006-05-10
12 <150> PRIOR APPLICATION NUMBER: KR 10-2003-0079897
13 <151> PRIOR FILING DATE: 2003-11-12
15 <150> PRIOR APPLICATION NUMBER: PCT/KR2004/000545
16 <151> PRIOR FILING DATE: 2004-03-15
18 <160> NUMBER OF SEQ ID NOS: 11
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22 <210> SEQ ID NO: 1
23 <211> LENGTH: 36
24 <212> TYPE: DNA
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
28 <223> OTHER INFORMATION: Env F primer
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Corrected Diskette Needed

36

32 cgcggatccg aattccatac ctggtgttgc tgacta

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38 <213> ORGANISM: Artificial Sequence

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50 <212> TYPE: DNA

51 <213> ORGANISM: Artificial Sequence .

53 <220> FEATURE:

54 <223> OTHER INFORMATION: LC597 primer

57 <400> SEQUENCE: 3

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62 <211> LENGTH: 35

63 <212> TYPE: DNA

64 <213> ORGANISM: Artificial Sequence

66 <220> FEATURE:

67 <223> OTHER INFORMATION: Spike R2 primer

70 <400> SEQUENCE: 4

71 tgctctagaa ttcttaaagg ttaccttcgt tctct

35

RAW SEQUENCE LISTING DATE: 02/26/2007
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Output Set: N:\CRF4\02262007\J578839A.raw

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90 <213> ORGANISM: Artificial Sequence
92 <220> FEATURE:
93 <223> OTHER INFORMATION: ScFvLnkC primer
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101 <211> LENGTH: 2058
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126 gggacgagtc tgcaaaataa gaacccccac cagcccatga ccctcacttg gcaggtactg
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128 tcccaaactg gagacgttgt ctgggataca aaggcagtcc agcccccttg gacttggtgg
130 cccacactta aacctgatgt atgtgccttg gcggctagtc ttgagtcctg ggatatcccg
132 ggaaccgatg tetegteete taaacgagte agaceteegg aeteagaeta taetgeeget
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134 tataagcaaa tcacctgggg agccataggg tgcagctacc ctcgggctag gactagaatg
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136 gcaageteta eettetaegt atgteeeegg gatggeegga eeettteaga agetagaagg
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138 tgcggggggc tagaatccct atactgtaaa gaatgggatt gtgagaccac ggggaccggt
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140 tattggctat ctaaatcctc aaaagacctc ataactgtaa aatgggacca aaatagcgaa
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142 tggactcaaa aatttcaaca gtgtcaccag accggctggt gtaaccccct taaaatagat
144 ttcacagaca aaggaaaatt atccaaggac tggataacgg gaaaaacctg gggattaaga
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146 ttctatgtgt ctggacatcc aggcgtacag ttcaccattc gcttaaaaat caccaacatg
148 ccagctgtgg cagtaggtcc tgacctcgtc cttgtggaac aaggacctcc tagaacgtcc
                                                                         840
                                                                         900
150 ctcgctctcc cacctcctct tcccccaagg gaagcgccac cgccatctct ccccgactct
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152 aactecacag coetggegae tagtgeacaa acteccaegg tgagaaaaac aattgttace
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154 ctaaacactc cgcctcccac cacaggcgac agactttttg atcttgtgca gggggccttc

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Output Set: N:\CRF4\02262007\J578839A.raw

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160 gaccggtgcc gctgggggac ccaaggaaag ctcaccctca ctgaggtctc aggacacggg
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                                                                        1260
162 ttgtgcatag gaaaggtgcc ctttacccat cagcatctct gcaatcagac cctatccatc
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164 aatteeteeg gagaceatea gtatetgete eeeteeaace atagetggtg ggettgeage
166 actggcctca ccccttgcct ctccacctca gtttttaatc agactagaga tttctgtatc
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170 gacaattete acceeaggae taaaagagag getgteteae ttaceetage tgttttaetg
172 qqqttqqqaa tcacqqcqqq aataqqtact ggttcaactg ccttaattaa aggacctata
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174 gacctccage aaggeetgae aagcetecag ategecatag atgetgaeet eegggeeete
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176 caagactcag tcagcaagtt agaggactca ctgacttccc tgtccgaggt agtgctccaa
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180 gaagagtgct gtttttacat agaccactca ggtgcagtac gggactccat gaaaaaactc
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182 aaagaaaaac tggataaaag acagttagag cgccagaaaa gccaaaactg gtatgaagga
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184 tggttcaata acteceettg gttcactace etgetateaa ecategetgg geecetatta
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186 ctcctccttc tgttgctcat cctcgggcca tgcatcatca ataagttagt tcaattcatc
                                                                        1980
                                                                        2040
188 aatgatagga taagtgcagt taaaattctg gtccttagac aaaaatatca ggccctagag
190 aacgaaggta acctttaa
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Lat about locations 1-345, 391-738,
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194 <211> LENGTH: 786
195 <212> TYPE: DNA
196 <213 > ORGANISM: (Artificial sequence
198 <220> FEATURE:
199 <221> NAME/KEY: misc feature
200 <222> LOCATION: (346)..(390)
201 <223> OTHER INFORMATION: (Gly4Ser)3 linker
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204 <220> FEATURE:
205 <221> NAME/KEY: misc feature
206 <222> LOCATION: (739)..(777)
207 <223> OTHER INFORMATION: PreS1 Tag
210 <400> SEQUENCE: 8
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215 cctggacaac gccttgagtg gatgggatat ttttctcctg gcaacgatga ttttaaatac
217 teccagaagt tecagggaeg egtgaeaate aetgeagaea aateegegag eacageetae
219 atggagetga geageetgag atetgaggae aeggeggtet attactgtge aagategttg
221 aacatggcat actggggcca agggactctg gtcactgtct cttcaggtgg aggcggttca
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223 ggcggaggtg gctctggcgg tggcggatcg gacattgtga tgacccagtc tccagactcc
225 ctggctgtgt ctctgggcga gagggccacc atcaactgca agtccagcca gagtgtttta
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227 tacagcagca acaataagaa ctacttagct tggtaccagc agaaaccagg acagcctcct
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229 aagetgetea tttactggge atetaceegg gaateegggg teeetgaeeg atteagtgge
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                                                                         660
231 agegggtetg ggacagattt cacteteace ateageagee tgeaggetga agatgtggea
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233 gtttattact gtcagcaata ttattcctat ccgttgacgt tcggccaagg gaccaaggtg
235 gaaatcaaag cggccgcagg agccaacgca aacaatccag attgggactt caaccccgcc
                                                                        780
                                                                        786
237 gcatag
                       envalid (2137 response (see item 10 on Ever Summary
240 <210> SEQ ID NO: 9
241 <211> LENGTH: 13
242 <212> TYPE: PRT
243 <213 > ORGANISM: PreS1 epitope at C-terminal of Tag-72pS1
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RAW SEQUENCE LISTING DATE: 02/26/2007 PATENT APPLICATION: US/10/578,839A TIME: 14:32:39

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342 tcactgactt ccctgtccga ggtagtgctc caaaatagga gaggccttga cttgctgttt
344 ctaaaagaag gtggcctctg tgcggcccta aaggaagagt gctgttttta catagaccac
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346 tcaggtgcag tacgggactc catgaaaaaa ctcaaagaaa aactggataa aagacagtta
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348 gagcgccaga aaagccaaaa ctggtatgaa ggatggttca ataactcccc ttggttcact
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350 accetgetat caaccatege tgggeeceta ttacteetee ttetgttget cateeteggg
352 ccatgcatca tcaataagtt agttcaattc atcaatgata ggataagtgc agttaaaatt
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358 <211> LENGTH: 956
359 <212> TYPE: PRT
360 <213> ORGANISM: Artificial Sequence
362 <220> FEATURE:
363 <223> OTHER INFORMATION: ScFv-GaLV Env GP chimeric ligand (FvGEL199)
366 <400> SEQUENCE: 11
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370 Leu Arg His Gln Met Ser Pro Gly Ser Trp Lys Arg Leu Ile Ile Leu
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371
373 Leu Ser Cys Val Phe Gly Gly Gly Gly Thr Ser Leu Gln Asn Lys Asn
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374
376 Pro His Gln Pro Met Thr Leu Thr Trp Gln Val Leu Ser Gln Thr Gly
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379 Asp Val Val Trp Asp Thr Lys Ala Val Gln Pro Pro Trp Thr Trp Trp
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382 Pro Thr Leu Lys Pro Asp Val Cys Ala Leu Ala Ala Ser Leu Glu Ser
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385 Trp Asp Ile Pro Gly Thr Asp Val Ser Ser Ser Lys Arg Val Arg Pro
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388 Pro Asp Ser Asp Tyr Thr Ala Ala Tyr Lys Gln Ile Thr Trp Gly Ala
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391 Ile Gly Cys Ser Tyr Pro Arg Ala Arg Thr Arg Met Ala Ser Ser Thr
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                                                 140
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394 Phe Tyr Val Cys Pro Arg Asp Gly Arg Thr Leu Ser Glu Ala Arg Arg
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                                             155
395 145
397 Cys Gly Gly Leu Glu Ser Leu Tyr Cys Lys Glu Trp Asp Cys Glu Thr
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400 Thr Gly Thr Gly Tyr Trp Leu Ser Lys Ser Ser Lys Asp Leu Ile Thr
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403 Val Lys Trp Asp Gln Asn Ser Gly Gly Gly Ser Gln Val Gln Leu
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406 Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala Ser Val Lys Val
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409 Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp His Ala Ile His Trp
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415 Pro Gly Asn Asp Asp Phe Lys Tyr Ser Gln Lys Phe Gln Gly Arg Val
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VERIFICATION SUMMARY

DATE: 02/26/2007 TIME: 14:32:40

PATENT APPLICATION: US/10/578,839A

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